INDIAN INSTITUTE OF MANAGEMENT, SIRMAUR

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Service Operations Management

Project Report

On

Operations at

WASHHERATTE®
LAUNDRY

Submitted to – Dr. M. Pachayappan

Presented By

Group No. 7

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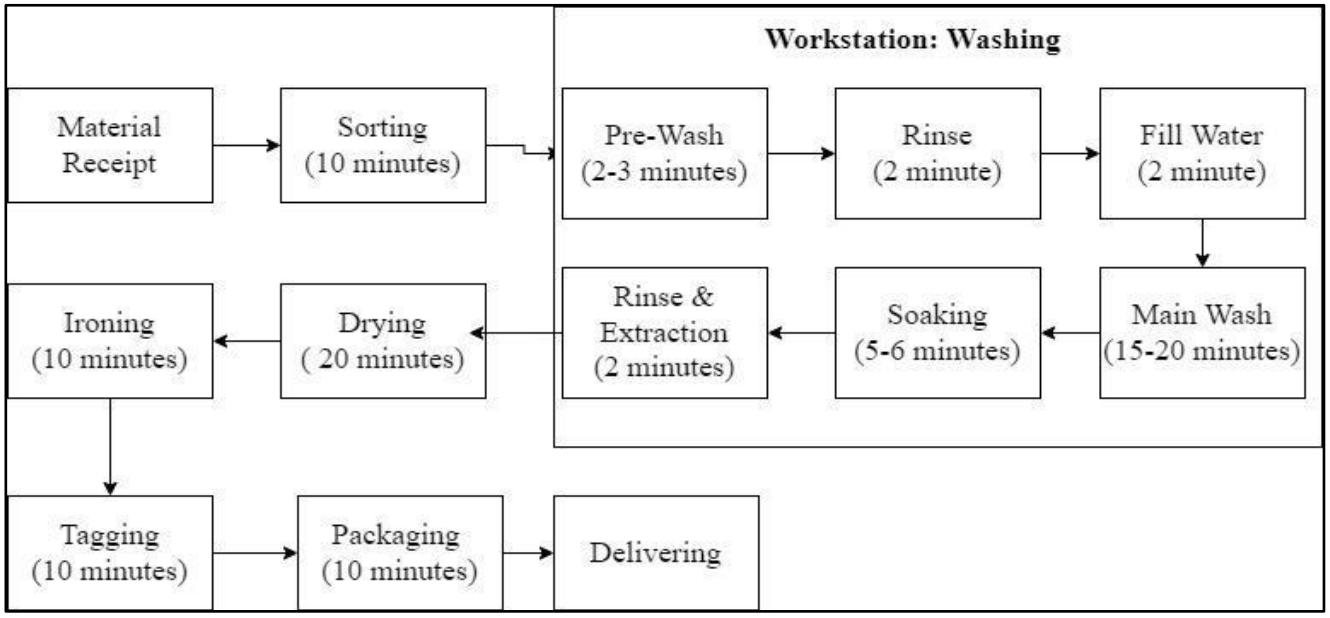
About Washheratte Laundry

- Washheratte Laundry provides laundry and dry clean services to pharma industries and retail customers in and around Paonta Sahib.
- Since founded, washheratte worked with numerous clients throughout the area. Catering to the pharmaceutical plants first, WL put maximum consideration into hygiene and industry suitable best practices.
- Completing projects efficiently and on schedule is daily priority, and go above and beyond to form lasting relationships with customers.

Process



Process Involved & its purposes

Sorting

Laundry operation involves a methodical procedure. Sorting through all the clothing is the first step. Laundry may be done in a number of different ways, but the most popular method is to sort by colour. To prevent stains, white clothes should be washed separately from coloured laundry. Institutional and Retail laundry are also separated in this process.

Washing

The process of really cleaning things happens at this point. Its three primary purposes are to extract soil from textiles, suspend that soil in a solution, and discharge that solution down the drain of the machine.

Drying

Drying of clothes can be done in a variety of methods, such as by air drying, using a clothesline, a laundry rack, or a dryer set to low heat. Some garment articles can also be dried by hanging them up. The dryer was put with the clean clothes in it. Care was taken to properly insert them inside before covering them. Few minutes of time was given to spin. A crucial step in the laundry process is drying.

Ironing

Ironing is done right after drying. Clothes appear better after being ironed because it removes creases and shrinks. In order to increase the quality and longevity of clothing, ironing also modifies the fabric.

Tagging

The tags for each individual garment are printed as soon as the order is ready in an automated garment tagging system. Order number, client name, and other information are all systematically listed on the tag.

Packaging

They are then stored in a specific place as they get ready to be packed and shipped, this was done correctly in a well-planned storage area. Before using it again, the clothes need to have a period of rest to recover. They are then carefully packed and covered in a plastic sheet as they get ready to be shipped.

Process Analysis

Activity	Cycle Time (min/unit)	Capacity (units/hr)	Capacity Utilization at bottleneck pacing	Work time in min	Idle time in min	Total Time
Sorting	10	6.00	28.57	17.14	42.86	60
Washing	35	1.71	100.00	60.00	0.00	60
Drying	20	3.00	57.14	34.29	25.71	60
Ironing	10	6.00	28.57	17.14	42.86	60
Tagging	10	6.00	28.57	17.14	42.86	60
Packaging	10	6.00	28.57	17.14	42.86	60
Total				162.86	197.14	
Average				27.14	32.86	
Bottleneck	35		Final Capacity Utilization	45.24		

Recommendation

1. The material receipt should be pre-sorted during the collection in a different bag.

2. Hot water should be used to decrease the washing time, eventually increasing the process's efficiency.

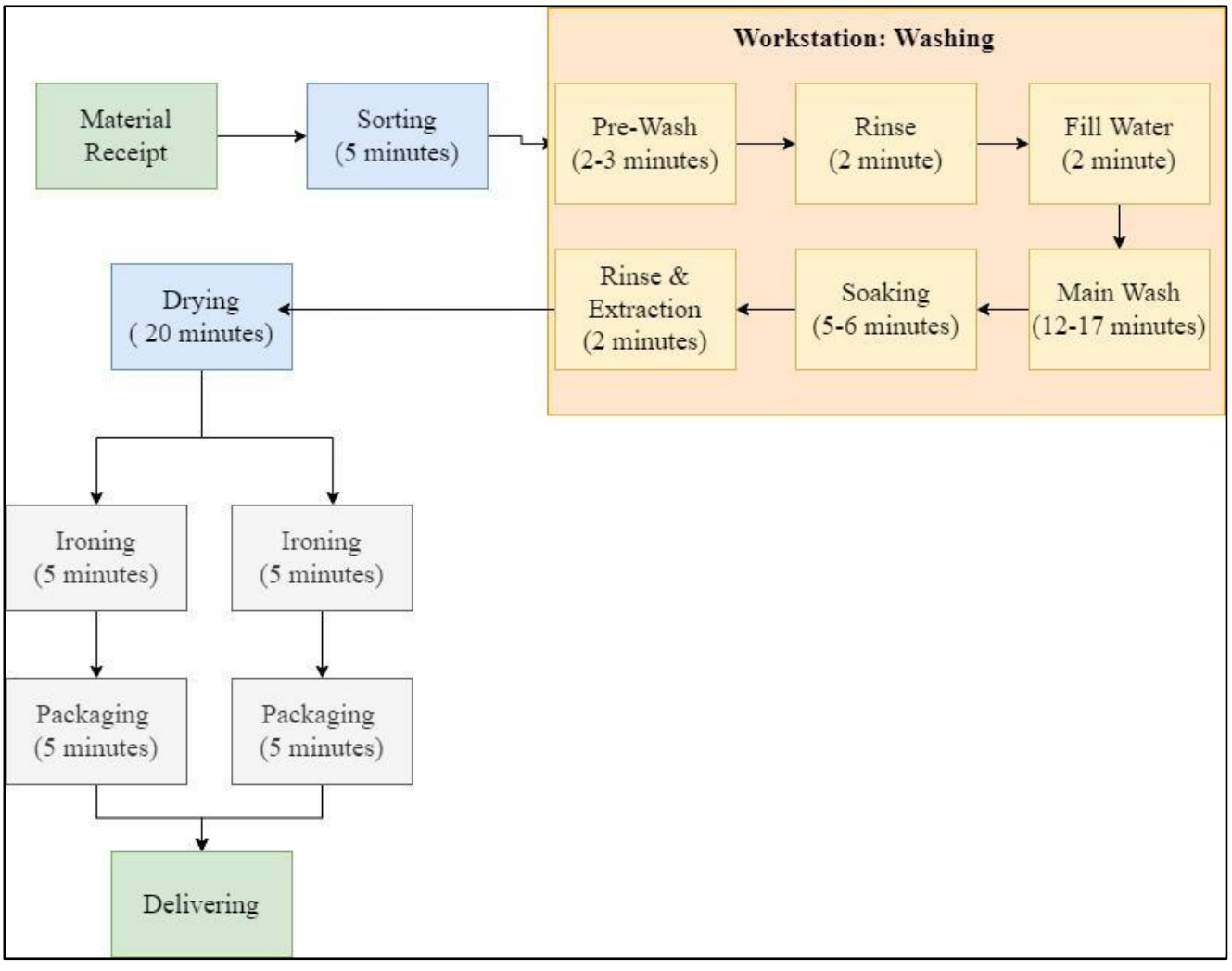
3. Tagging should be done before the washing so that the company can be known which cloth belongs to which customer, and they can wash different client cloths in one machine so that the machine is working at the optimum level. Before packing, we can short the fabric according to the tagging id and use RFID for tagging.

4. We can optimize the batch process by using it at the optimum level.

5. Packing should be done in a recyclable paper bag. It is lower in cost than the plastic bag the company has been using recently. We can also save the environment, and customer satisfaction will also be increased.

6. We can see after the calculation that the idle time is more so that we can use the idle labour in the iron and packing so that the time will be decreased and the process will be more efficient.
7. There is no generator in the company, so in case of a power cut, the complete operation is stopped so that the long-term recommendation to the company to resolve the power cut problem.

Proposed New Process Flow



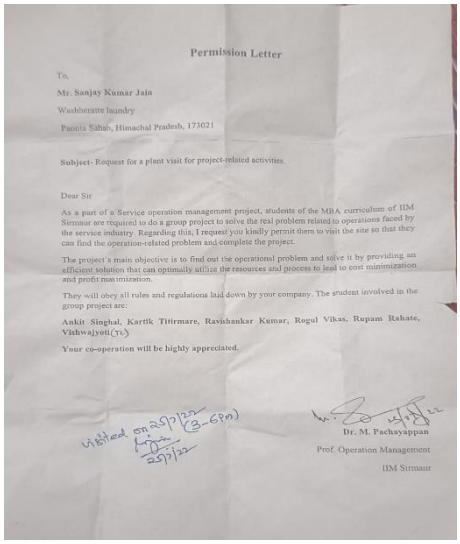
Activity	Cycle Time (min/unit)	Capacity (units/hr)	Capacity Utilization at bottleneck pacing	Work time in min	Idle time in min	Total Time
Sorting	10	6.00	31.25	18.75	41.25	60
Washing	32	1.88	100.00	60.00	0.00	60
Drying	20	3.00	62.50	37.50	22.50	60
Ironing & Packaging	10	6.00	31.25	18.75	41.25	60
Total				135.00	105.00	
Average				33.75	26.25	
Bottleneck	32		**Final Capacity Utilization**	**56.25**		

Comparison Table

	Bottleneck in min	Throughput time	Final Capacity Utilization	Work time in min	Idle time in min
Before	35	95.00	45.24	27.14	32.86
After	32	67.00	56.25	33.75	26.25

Conclusion

As we can see in the comparison table the **bottleneck time is decreased** and through this assignment, we found out the main operational problem and solved it by providing an efficient solution that optimally utilized the resources while also the recommended processes will lead to cost optimization and profit maximization for the company.



Permission Letter

To,

Mr. Sanjay Kumar Jain

Washberatte laundry

Paonta Sahib, Himachal Pradesh, 173021

Subject- Request for a plant visit for project-related activities.

Dear Sir

As a part of a Service operation management project, students of the MBA curriculum of IIM Sirmaur are required to do a group project to solve the real problem related to operations faced by the service industry. Regarding this, I request you kindly permit them to visit the site so that they can find the operation-related problem and complete the project.

The project's main objective is to find out the operational problem and solve it by providing an efficient solution that can optimally utilize the resources and process to lead to cost minimization and profit maximization.

They will obey all rules and regulations laid down by your company. The student involved in the group project are:

Ankit Singhal, Kartik Titirmare, Ravishankar Kumar, Rogul Vikas, Rupam Rahate, Vishwajyoti(TL)

Your co-operation will be highly appreciated.

Visited on 25/7/22 (3-6PM)

25/7/22

Dr. M. Pachayappan

Prof. Operation Management

IIM Sirmaur